

IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Viatcheslav V. Osipov et al.

Confirmation No.: 9654

Application No.: 10/632,038

Examiner: Dickey, Thomas L.

Filing Date: July 30, 2003

Group Art Unit: 2826

Title: AMPLIFIERS USING SPIN INJECTION AND MAGNETIC CONTROL OF ELECTRON SPINS

Mail Stop Amendment  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL LETTER FOR RESPONSE/AMENDMENT

Sir:

Transmitted herewith is/are the following in the above-identified application:

- (X) Response/Amendment ( ) Petition to extend time to respond  
(X) New fee as calculated below ( ) Supplemental Declaration  
( ) No additional fee  
( ) Other: \_\_\_\_\_ (fee \$ \_\_\_\_\_)

| CLAIMS AS AMENDED BY OTHER THAN A SMALL ENTITY       |                                            |                        |                                              |                         |             |                           |
|------------------------------------------------------|--------------------------------------------|------------------------|----------------------------------------------|-------------------------|-------------|---------------------------|
| (1)<br>FOR                                           | (2)<br>CLAIMS REMAINING<br>AFTER AMENDMENT | (3)<br>NUMBER<br>EXTRA | (4)<br>HIGHEST NUMBER<br>PREVIOUSLY PAID FOR | (5)<br>PRESENT<br>EXTRA | (6)<br>RATE | (7)<br>ADDITIONAL<br>FEES |
| TOTAL<br>CLAIMS                                      | 29                                         | MINUS                  | 25                                           | = 4                     | X \$18      | \$ 72                     |
| INDEP.<br>CLAIMS                                     | 2                                          | MINUS                  | 3                                            | = 0                     | X \$86      | \$ 0                      |
| [ ] FIRST PRESENTATION OF A MULTIPLE DEPENDENT CLAIM |                                            |                        |                                              |                         | + \$290     | \$ 0                      |
| EXTENSION<br>FEE                                     | 1ST MONTH<br>\$110.00                      | 2ND MONTH<br>\$420.00  | 3RD MONTH<br>\$950.00                        | 4TH MONTH<br>\$1480.00  |             | \$ 0                      |
| OTHER FEES                                           |                                            |                        |                                              |                         |             | \$                        |
| TOTAL ADDITIONAL FEE FOR THIS AMENDMENT              |                                            |                        |                                              |                         |             | \$ 72                     |

Charge \$ 72 to Deposit Account 08-2025. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. A duplicate copy of this sheet is enclosed.

"Express Mail" label no. ED 004 811 358 US

Date of Deposit Sept. 28, 2004

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, Alexandria, VA 22313-1450.

By David Millers

Typed Name: David Millers

Respectfully submitted,

Viatcheslav V. Osipov et al.

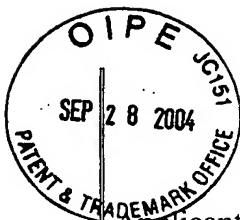
By David Millers

David Millers

Attorney/Agent for Applicant(s)

Reg. No. 37,396

Date: Sept. 28, 2004



9130704

1Fu/\$

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Viatcheslav V. Osipov and Alexandre M. Bratkovski  
Assignee: Hewlett-Packard Development Company, L.P.  
Title: AMPLIFIERS USING SPIN INJECTION AND MAGNETIC CONTROL OF ELECTRON SPINS  
Serial No.: 10/632,038 Filing Date: July 30, 2003  
Examiner: Thomas L. Dickey Group Art Unit: 2826  
Docket No.: 200300686-1

San Jose, California  
September 28, 2004

Mail Stop AMENDMENT  
COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE TO OFFICE ACTION**

Dear Sir:

This response to the Office Action dated June 28, 2004, which has a statutorily shortened period for response that ends September 28, 2004, includes:

A listing of the claims presented for further examination;

Remarks given in reply to the Office Action dated June 28, 2004.

THE PATENT LAW OFFICES  
OF DAVID MILLERS  
6560 ASHFIELD COURT  
SAN JOSE, CA 95120  
PH: (408) 927-6700  
FX: (408) 927-6701

10/01/2004 AWONDAF1 00000060 082025 10632038

01 FC:1202 72.00 DA